



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,371	11/29/2003	Allan P. Bakke		3246

7590 03/30/2006  
ALLAN P. BAKKE  
3220 COUNTY VIEW CT SW  
ROCHESTER, MN 55902

EXAMINER	
PRASAD, SONAL	
ART UNIT	PAPER NUMBER
3767	

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/724,371	<b>Applicant(s)</b> BAKKE, ALLAN P.	
	<b>Examiner</b> Sonal Prasad	<b>Art Unit</b> 3767	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/29/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 8A is rejected under 35 U.S.C. 103(a) as being unpatentable over Bakke (US 6,608,968) in view of Shigezawa (US 6,641,556). The claim differs from Bakke in disclosing the tubing for the blood/fluid warmer. Shigezawa discloses a passively insulated and actively warmed disposable outlet patient flow line system for in-line blood/fluid warmers comprising: a flexible tube flow line made of polyvinyl chloride or other resinous material has a central blood-carrying tube about 0.12 inch inside diameter and a wall thickness of about 0.04 inch, and is supported inside a larger tube which is co-extruded with said central tube and has an outside diameter of about 0.37 inch and a wall thickness of about 0.04 inch, said central and outer tubes being interconnected by co-extruded webs about 0.04 inch thick which appear in cross section as a planar diametrical web across the entire cross section with the exception of said central tube's lumen, wherein an annular space between said central and outer tubes is filled with heat insulative still air(Claims 1-4.) It would have been obvious at the time of invention to one of ordinary skill in the art to include the specific tubing disclosed in Bakke as taught by Shigezawa to improve the function of the outlet flow line.

Art Unit: 3767

3. Claim 8B-F is rejected under 35 U.S.C. 103(a) as being unpatentable over Bakke (US 6,608,968.) in view of Shigezawa (US 6,641,556) and in further view of Bakke (US 5,420,962). The claim differs from Bakke in disclosing the method of heating. Bakke discloses said flow line having an inlet end adapted to connect to the warm blood outlet of an in-line blood warmer apparatus and an outlet end adapted to a patient intravenous site (Claim 1). It would have been obvious at the time of invention to one of ordinary skill in the art to include the specific tubing disclosed in Bakke as taught by Bakke to improve the function of the method of heating.

Claims 8C,D, E, F, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakke (US 6,608,968.) in view of Shigezawa (US 6,641,556). The claim differs from Bakke in disclosing the length of tubing, the electrical heating segment, and the temperature controller. Jordan discloses a flexible elongated electrical resistance heater segment located within each half of said annular air space, D.) said heater segments extending in length from about one half to nine tenths the length of said flexible tube flow line, and extending all the way to said outlet end of said flow line, E.) said internal heater segments being electrically and mechanically joined together at said outlet end of said flow line forming a series electrical resistance heater. F.) the two proximal ends of said electrical resistance heater being electrically and mechanically adapted to be removably connected to a temperature controller located in said blood warmer apparatus, C.) said electrical resistance heater being maintained at a controlled temperature of about 42C by a controller mounted inside said blood warmer apparatus,

Art Unit: 3767

whereby blood is maintained at normothermic temperature near 42C while passing slowly at very low flow rates through said patient flow line system. It would have been obvious at the time of invention to one of ordinary skill in the art to include the specific tubing disclosed in Bakke as taught by Shigezawa to improve the function of the method of heating.

Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakke (US 5,420,962). Bakke discloses the invention substantially as claimed. However, he does not disclose the exact diameter, thickness, width, percentage of alloy materials, or shape as claimed. However, these parameters are deemed matters of design choice well within the skill of the ordinary artisan, obtained through routine experimentation in determining optimum results.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonal Prasad whose telephone number is 571-272-3383. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3767

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sonal Prasad  
Examiner  
Art Unit 3767

*Kevin C. Simmons*  
*3/20/06*